

MAGNETICALLY NAVIGABLE TELESCOPING CATHETER
AND METHOD OF NAVIGATING TELESCOPING CATHETER

ABSTRACT OF THE DISCLOSURE

A magnetically navigable catheter includes a sheath having a proximal end
5 and a distal end, and an extension member having a proximal end and a distal end,
slidably mounted in the sheath so that the distal end portion of the extension member
telescopes from the distal end of the sheath. The distal end portion of the extension
member being relatively more flexible than the distal end of the sheath. There may be
one or more electrodes on the distal end of the extension member. There is also at
10 least one magnet, and preferably more than one magnet, on the distal end portion of
the extension member to allow the distal end of extension member to be oriented by
the application of an externally applied magnetic field. The catheter preferably also
includes a sleeve, having a proximal end and a distal end, the sleeve being slidably
mounted in the sheath so that the distal end portion of the sleeve telescopes from the
15 distal end of the sheath, so that the sleeve can be selectively extended and retracted
relative to the sheath, and the extension member can be selectively extended and
retracted relative to the sleeve. According to the method of this invention, the distal
end of the electrode catheter is introduced into the part of the body where the
electrode will be used to contact the specific body structures, and the electrode is
20 moved into contact with the body structure by applying an external magnetic field and
selectively telescoping the extension member relative to the sheath to bring the
electrode on the distal end of the extension member into contact with the specific
body structure.